

CLAIMS

WHAT IS CLAIMED IS:

- 5 1. (Amended) A plant comprising at least one promoter promoting a specific level of expression and a gene operably linked to the promoter, wherein the specificity of the promoter is determined based on the expression frequency of the gene including the promoter
- 10 in a cDNA database in which the gene including the promoter is included, and the promoter is selected as promoting desired specific expression.
- 15 2. The plant according to claim 1 wherein the gene is constitutively expressed.
3. The plant according to claim 1 wherein the gene is specifically expressed in leaves.
- 20 4. The plant according to claim 1 wherein the gene is specifically expressed in callus.
5. The plant according to claim 1 wherein the plant is rice.
- 25 6. The plant according to claim 1 wherein the gene is a disease resistance gene or an insect resistance gene.
- 30 7. The plant according to claim 1 wherein the gene is a gene selected from the group consisting of a vitamin synthesizing gene, a carbohydrate synthesizing gene, a lipid synthesizing gene, a polyketide synthesizing gene, a photosynthesizing system gene, a functional component

synthesizing gene and a transcription factor.

8. (Amended) A promoter promoting a specific level of expression, wherein the specificity of the promoter is determined based on the expression frequency of the gene including the promoter in a cDNA database in which the gene including the promoter is included, and the promoter is selected as promoting desired specific expression.

10

9. The promoter according to claim 8 which does not drive the expression of a gene in fruit.

10. The promoter according to claim 8 which specifically drives the expression of a gene in leaves.

11. The promoter according to claim 8 which specifically drives the expression of a gene in callus.

12. (Amended) An expression cassette comprising a promoter wherein the specificity of the promoter is determined based on the expression frequency of the gene including the promoter in a cDNA database in which the gene including the promoter is included, and the promoter is selected as promoting desired specific expression.

30

13. The expression cassette according to claim 12 which promotes the constitutive expression of a gene.

14. The expression cassette according to claim 12 which specifically drives the expression of a gene in leaves.

15. The expression cassette according to claim 12 which specifically drives the specific expression of a gene in callus.

5 16. (Amended) An available site of a plant which is obtained from a plant comprising at least one promoter promoting a specific expression and a gene operably linked to the promoter, wherein the specificity of the promoter is determined based on the expression
10 frequency of the gene including the promoter in a cDNA database in which the gene including the promoter is included, and the promoter is selected as promoting desired specific expression.

15 17. The available site according to claim 16 which is a leaf, a stem or a fruit.

18. (Amended) A method for producing a desired gene product at a desired site, comprising the steps of:

20 determining the specificity of a promoter
~~{wherein the specificity of the promoter is determined}~~
based on the expression frequency of the gene including the promoter in a cDNA database in which the gene including the promoter is included, and selecting the
25 promoter which promotes desired specific expression;

producing a linked mixture by operably linking the promoter and a nucleic acid molecule encoding the desired gene product;

30 introducing the linked mixture into a plant;
growing the plant; and
collecting the desired gene product in the plant.

19. (Amended) A method for producing a plant

specifically expressing a desired gene product at a desired site, comprising the steps of:

determining the specificity of a promoter
~~{wherein the specificity of the promoter is determined}~~
5 based on the expression frequency of the gene including
the promoter in a cDNA database in which the gene
including the promoter is included, and selecting the
promoter which promotes desired specific expression;

producing a linked mixture by operably linking
10 the promoter and a nucleic acid molecule encoding the
desired gene product;

introducing the linked mixture into a plant; and
growing the plant.

15 20. The method according to claim 19 wherein the
specificity of the promoter is determined by the
analysis of a DNA chip.

21. A gene product which is obtained from the plant
20 obtained by the method according to claim 19.

22. (New) A promoter according to Claim 11, having a
sequence set forth in SEQ ID NO: 1.

25 23. (New) A promoter according to Claim 10, having a
sequence set forth in SEQ ID NO: 2.

24. (New) A promoter according to Claim 8, having a
sequence set forth in SEQ ID NO: 3, which induces
30 constitutive expression.

25. (New) A plant according to Claim 4, wherein the
promoter has a sequence set forth in SEQ ID NO: 1.

26. (New) A plant according to Claim 3, wherein the promoter has a sequence set forth in SEQ ID NO: 2.

5 27. (New) A plant according to Claim 2, wherein the promoter has a sequence set forth in SEQ ID NO: 3.